

### DEFENSE CONTRACT MANAGEMENT AGENCY

DEFENSE CONTRACT MANAGEMENT AGENCY TEXAS 600 N. PEARL STREET SUITE 1630 DALLAS, TEXAS 75201-2843

IN REPLY

REFER TO: DCMA-ABR; 10-01 Level III CAR

April 06, 2010

MEMORANDUM FOR: Unicor Federal Prison Industries, INC

Unicor Metal Products Division

320 1st Street Northwest Washington, DC 20534-0002

SUBJECT: Level III Corrective Action Request

Dear

This Level III Corrective Action Request (CAR) is issued to notify you that the Unicor Federal Prison Industries implementation of a Quality System for the facility located in Beaumont Texas is not in compliance with the contractual requirement to maintain a Quality System in accordance with the requirements of ISO 9001:2000. It is also serving as the transmittal document to formally provide you with an official copy of the recent Quality System Evaluation (QSE) Audit results, identify the areas which you must address in your response to the government, identify who you should address your response to, and the due date of a response to preclude additional formal contractual remedies by the government.

Background: During the time period of 22 - 25 March 2010, DCMA conducted a QSE at the Unicor Federal Prison facility located at 5980 Knauth Road Beaumont Texas. The QSE was focused on contracts SPM1C1-08-D-1019 and SPM1C1-08-D-C102; both of which have FAR Clause 52.246-11 (Higher-Level Contract Quality Requirements) incorporated in Section E, requiring the implementation of a quality system in accordance with ISO 9002 [which is superseded and was replaced by 9001:2000]). As discussed during the outbrief on 25 March 2010, seven Major finding were identified during the audit and as a result the determination by the DCMA QSE Team was that the current implementation of a Quality System by Unicor Federal Prison Industries at the Beaumont Texas facility is not compliant to the contractual requirement of: Maintain a Quality System in accordance with ISO 9001:2000.

In order for your response to this Level III Request for Corrective Action to be considered acceptable, it must correct the seven specific major findings identified in the attached QSE and specifically address all of the following areas:

- A. Cause of the nonconformity (failure by Unicor to maintain a Quality System in accordance with the requirements of ISO 9001:2000).
- B. Actions taken or planned to eliminate the cause and prevent recurrence of the nonconformity.

- C. Actions taken to correct the specific nonconformity.
- D. Whether products already delivered to the government may contain non-conforming material.
- E. If appropriate, action taken to correct the weakness which allowed deficient product to be delivered to the government.
- F. Target dates for implementation of planned actions

Please provide your written response to the undersigned no later than close of business, 14 April 2010 instead of the 9<sup>th</sup> of April as set forth in the attached QSE.

If you have any questions regarding this Level III Corrective Action Request, please do not hesitate to contact me either thru e-mail or telephone

Thank you for your continued support and assistance, the helmets associated with the contracts are 'Critical Safety Items' and we at DCMA Texas are charged with insuring that our nation's military members are provided with equipment that meets all contract requirements.

Director

DCMA North Texas—OK—AR Group

DCMA Texas

cc:

Director, Supplier Operations Clothing & Textiles Supply Chain DSCP DLA
Commander DCMA Texas, DCMA
Director, DCMAA Technical Operations, DCMA
PCO DSCP DLA (SPM1C1-08-D-C102)
PCO DSCP DLA (SPM1C1-08-D-1019)
ACO DCMA Maryland, DCMA

#### Attachments:

QSE Audit Report Number: DCMAA OC QSE -10-02 dated March 29, 2010 (with findings)



## DEFENSE CONTRACT MANAGEMENT AGENCY AERONAUTICAL SYSTEMS DIVISION 6350 WALKER LANE ALEXANDRIA, VA 22310-3241



# QUALITY SYSTEM EVALUATION AUDIT REPORT

UNICOR
Federal Prison Industries
5980 Knauth Road
Beaumont, Texas 7705-5002
Report Number DCMAA OC QSE-10-02

March 26, 2010

QUALITY SYSTEM EVALUATION AUDIT REPORT

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	DISTRIBUTION: Defense Supply Center Philadelphia, Director of Supplier Operations, Clothing & Textiles Supply Chain, DCMA ASD Technical Director, DCMA ASD Deputy Technical Director, DCMA Texas Commander, DCMA Texas Deputy Director,				

### 1.0 Supplier Information

Supplier Name: UNICOR Federal Prison Industries, INC.

Street Address: 5980 Knauth Road

City, State, Zip Code: Beaumont, Texas 77705-5002

Point Of Contact:

E-mail:

Telephone Number:

Number of Employees: 199

Number of Shifts: 1

ISO Standard: ISO9001: 2000

Audit Date: March 22-25, 2010

/s/

DCMA Lead Assessor DCMA Aeronautical Systems Division Senior Technical Advisor - Quality Assurance March 26, 2010

# QUALITY SYSTEM EVALUATION AUDIT REPORT UNICOR, Federal Prison Industries

## 2.0 Executive Summary

Defense Supply Center Philadelphia, requested that DCMA Texas, complete a Quality System Evaluation (QSE) after the delivery of suspected nonconforming product. Advanced Combat Helmets (ACH) and Lightweight Combat Helmets (LWCH) manufactured by the Unicor contractor Armorsource LLC (Hebron, OH) via Army and DSCP prime contracts may have been produced using unauthorized rework/repair procedures resulting in contractual non-conformances. A stop work order was issued by the Army on 3 Feb 10 and by DSCP on two additional contracts on 24 Feb 10. Both the Army and DSCP have initiated additional inspections and tests on the helmets still in inventory.

A DCMA Audit Team conducted a Quality System Evaluation of the Unicor facility located at the Federal Prison in Beaumont, Texas on 22-25 March 2010. This Quality System Evaluation was performed to the ISO 9001:2000 Quality Standard. Although the Audit Team's efforts to evaluate the health of the UNICOR Quality Management System were limited by stop work orders and the Dept. of Justice removal of documents, each ISO 9001:2000 paragraph, except 7.3, was evaluated using all available information and interviewing currently assigned personnel.

The audit included a review of the Quality Manual, records of internal quality audits, management review minutes, and records of corrective actions, third party audit information and certification, and a review of supplier performance.

The Audit Plan and Schedule is listed in Paragraph 4.4.

The environment in which UNICOR operates is unique and may be contributing to the challenges of developing, implementing, and sustaining a healthy Quality Management System.

As a result of the QSE, noncompliance with requirements were noted which require corrective action. Unicor shall provide the Corrective Action Plan in writing to DCMA Texas' NLT 09 April 2010. Based on the corrective action plan, an on-site follow-up visit will be scheduled.

## 3.0 Statement of Capability and Performance

Unicor Federal Prison Industries INC., located on 5980 Knauth Road, Beaumont, Texas, is currently performing on government contracts requiring compliance to the requirements of the ISO9001:2000 Quality Standard. This supplier has an eight year history of delivering similar conforming product. However, the audit team does not recommend qualification of the quality system maintained by Unicor based on the results of the audit, the review of quality procedures and documentation, and potential delivery of nonconforming material. Although the Unicor Quality Management System is not currently compliant to ISO 9001:2000, this system can become compliant within a short timeframe by focusing corrective action efforts on:

Management, Quality Procedures, Control of Documents and Nonconforming Material, Training and Corrective Action.

In order to close the noted non-conformances, DCMA Texas will

- Evaluate, assess, and track Unicor's Corrective Action Plan;
- Schedule periodic process reviews to evaluate elements of Unicor's Quality Management System.
- Conduct Product Assurance surveillance in accordance with DCMA Quality Assurance policies. This surveillance strategy shall be adjusted based on findings and data analysis.
- Continue to participate as observers in internal audits and third party audits.

#### 4.0 Audit Details

- **4.1 System Standard:** Compliance to ISO9001: 2000, Quality Management Systems Requirements.
- **4.2 Qualification Scope:** Manufacture of Light Weight Combat Helmets (LWCH) and Advanced Combat Helmets (ACH) purchased on contracts SPM1C1-08-D-1019 and SPM1C1-08-D-C102.

#### 4.3 Audit Team:

Lead Assessor Auditor Auditor Auditor



#### 4.4 Audit Plan

Monday, 22 March, 2010

7:30	Arrive @ Unicor Facility		
8:00-9:00	Opening Meeting/QSE In-Brief		
9:00-1600	Audit ISO Requirements/Elements		
	- Para 4.0, 4.1, 4.2.1, 4.2.2, 4.2.3, 4.2.4		
	- Para. 7.1, 7.2, 7.2.1, 7.2.2, & 7.2.3		
	- Para 5.1, 5.2, 5.3, 5.4, 5.5, & 5.6		
	- Para 6.1, 6.2, 6.3, & 6.4		
1600-1630	Supplier Out-Brief (Day 1)		

Tuesday, 23 March 2010

7:45	Arrive @ Unicor Facility
8:00-12:00	Audit ISO Requirements/Elements
	- Para. 8, 8.1, 8.2, 8.2.1, & 8.2.2
	<ul><li>Para. 7.4, 7.4.1, 7.4.2, and 7.4.3</li></ul>
	<ul><li>– Para. 7.5, 7.5.1, and 7.5.2</li></ul>
	- Para. 8.3
1600-1630	Supplier Out brief (Day 2)

Wednesday, 24 March, 2010

7:45	Arrive @ Unicor Facility
8:00-12:00	Audit ISO Requirements/Elements
	- Para 8.5, 8.5.1, 8.5.2, and 8.5.3
	- Para. 7.5.3, 7.5.4, 7.5.5 & 7.6
	<ul><li>– Para. 8.2.3, and 8.2.4</li></ul>
	- Para. 8.4
1600-1630	Supplier Out-Brief (Day 3)

Thursday, 25 March, 2010

8:00-15:00	Finish Auditing & Write Report	
1500-1530	Out-Brief	

#### 5.0 Audit Results

### 5.1 Recommendation:

While Unicor's Quality System is not currently compliant to ISO 9001:2000 requirements, the Quality System can be improved with effort focused on identified nonconforming areas/paragraphs.

# 5.2 Summary and Status of Noncompliance Reports (See Listing of QSE Findings Attached)

- UNICOR QSE-01 (M) Failure of management to assure the continued health of the Quality Management System.
- UNICOR-QSE-02 (M) Corrective action taken was not adequate or sufficient to correct or prevent a deficiency Results of Internal Audits performed for 2008-2009 show reoccurrence of similar findings indicating that corrective actions have not been effective. Some findings noted in this audit have been previously identified by UNICOR's internal audits, but have not been corrected.
- UNICOR-QSE-03 (M), ISO Para 7.5.1, Failure to Follow Quality Procedures
- UNICOR-QSE-04 (M), ISO Para. 4.2.3, Lack of Document Control of Quality Procedures
- 5. UNICOR-QSE-05 (M), Inadequate Quality Procedures
- 6. UNICOR- QSE-06 (m), Quality Manual Scope
- 7. UNICOR-QSE-07 (M), Training Documentation Inadequate, Outdated, or Missing
- 8. UNICOR -QSE-08 (M), Segregation and Disposition of Nonconforming Material

## 5.2.1 Noncompliance Corrective Action Plan

On March 25, 2010, DCMA auditors conducted the QSE Out-brief and discussed audit findings and the path forward with Unicor management. Unicor is required to develop a Corrective Action Plan (CAP) to identify actions and milestones to correct/prevent the above listed nonconformities, UNICOR-QSE-01 through UNICOR-QSE-08. The Corrective Action Plan will be provided in writing NLT April 09, 2010 to Stated corrective actions are scheduled to be validated by DCMA Texas during subsequent follow-up visits.

# 5.3 Summary of Observation Reports (See Listing of QSE Findings Attached)

 UNICOR-QSE-OBS-09 Through UNICOR-QSE-OBS-19

UNICOR Quality System Evaluation – List of Findings					
	Compliance Review Conducted March 22-25, 2010				
Finding	Unicor Reference	ISO 9001:2000	Finding (M/m/O/I)		
Noncom	pliance to Red	quirements (M	) Major (m) Minor		
UNICOR QSE -01	QM-4220, QMS Manual	4.1 c, d, e, f	1. (M) Failure of management to assure the continued health of the Quality Management System. Per ISO Para 4.1, The organization shall establish, document, and maintain a quality management system and continually improve its effectiveness in accordance with the requirements of this International Standard. 4.1.d Ensure the availability of resources 4.1.f Implement actions necessary to achieve planned results and continual improvement of these processes		
UNICOR QSE-02	QP-8500	8.5.2 & 8.5.3	2. (M) Corrective action taken was not adequate or sufficient to correct or prevent a deficiency. Despite multiple internal audit findings regarding control of documents and control of nonconforming material, these areas still remain a concern.		
UNICOR QSE-03a	QM-4220, 7.1, 7.5.2, 7.5.3	7.1	3. (M) Failure to Follow Quality Procedures 3a. A review of several helmet history/route sheets #qp7530-75 revealed that the required quality control initials and stamping points were either not completed or missing at various process steps as required by QM-4220, 7.1 thru 7.5.3.3. QA inspectors not following procedures or training instructions.		
UNICOR QSE-03b	QM-4220, QMS Manual	7.5.1	3b. Quality Objectives – QMS Manual Para 5.4.1, requires that Quality Objectives be reviewed a minimum of once a year. No documented evidence was provided of a Quality Objective review completed for 2008.		
UNICOR QSE-03C.	QP4220	5.3	3c.Quality Policy does not include a commitment to continually improve the effectiveness of the QMS.  It is documented in the Quality Objective paragraph and evidence of continual improvement exists on the manufacturing floor.		
UNICOR QSE-03d	QP5600	5.6.1	3d. QP 5600 requires management review occur and be documented twice a year. Objective evidence (records) for 1 or more years showed only one review being documented.		
UNICOR QSE-04	QP-4230		4. (M) Lack of Document Control of Quality Procedures.  The current revision status of many documents is unclear and does not meet the requirements of ISO Paragraph 4.2.3.A review of multiple documents shows conflict between Master Documentation List and latest BMPL procedures in binder. The current system cannot prevent the unintended use of obsolete documents (ISO 4.2.3.g).  Note: Unicor personnel are in process of updating the Master Documentation List.  Quality Manual QM-4220, (from Master List) is listed as Rev. E, issued 12/01/08. QM in BMPL Procedures Binder is Rev G issued 06/25/09. Table of Contents references incorrect pages numbers: Example-Section 2.2, Scope, refers to Page 15, but scope is actually located on Page 18. Section 8.5.3, Preventive Action is not located on Page 50 but instead is found on Page 53.		

UNICOR QSE-05a & 05b	QM-4220, & QP-8500	4.1, 8.5.2, 8.5.3	<ul> <li>5. (M) Inadequate Quality Procedures</li> <li>5a. QP-8500, for Corrective and Preventive Action, Para. 7.3.4 and 8.0 references procedures and forms that do not exist and the review process cannot be completed in accordance with the procedure. QP- 4250 – QMS Process Maintenance Report qp-4250-1 QMS Process Maintenance Form qp-4250-2 QMS Process Maintenance Log</li> <li>5b. QP-8500 also addresses data analysis required per ISO Para 8.4. This procedure does not define or address the data analysis relating to: <ul> <li>Customer satisfaction</li> <li>Conformity to product requirements</li> <li>Characteristics and trends of the processes and products including opportunities for preventive action</li> <li>Suppliers</li> </ul> </li> </ul>
UNICOR QSE-06	QM-4220, QMS Manual	4.2.2.a	6. (m) Quality Manual Scope - QM-4220, Policy Paragraph 2.2 Scope, no exclusions are listed for Paragraph 7.3, Design and Development, although Unicor does not have design authority. ISO Para 4.2.2.a requires details of, and justification for, exclusions.
UNICOR QSE- 07a&07b	QM-4220, & QP-6220	6.2.1, 6.2.2	7. (M) Training Documentation -Inadequate, Outdated or Missing  7a. A review of several press operators training folders revealed that the training documentation was either inadequate, outdated, or not there as required by QM-4220, 6.2.1, 6.2.2, and QP-6220.  7b. Misfiled Personnel Records -A review of one QA's training folder revealed an FPI Form 96 from another employee. QP-6220, 6.0 states that the quality manager is responsible for maintaining training records. Training records not being maintained.
UNICOR QSE-07c	QP-6220	6.3	Training Documentation & Corrective Action 7c. Hot presses are not being cleaned after every press, Management Review Agenda Results dated 08/20/09 stated that the presses are not being cleaned after every press. The corrective action for this internal audit finding stated, "production will update all training programs for production workers by January, 2010. Department supervisors shall establish and relate any and all improvements to training programs or procedures." A review of several press operators training records indicated that they are still insufficient and vague.
UNICOR QSE-07d	QP-6220	6.1	7d. QP-6220, Para. 6.0 requires that BMPL Department Managers have established, documented, and maintain records for the minimum education, training, skills, and/or experience required for each position under their supervision. Supplier was unable to produce documented evidence of compliance to this requirement.
UNICOR QSE-07e	QM-4220	6.4	7e. QM-4220, Para. 6.4 states that periodic audits are conducted on the workplace environment (MSDS, Pyrometers, Multi-Zone Temperature/Humidity Meters. Supplier was unable to produce documented evidence of compliance to this requirement.

		T	0 (11) 0
UNICOR QSE-08a		> <b>1</b> 0	8. (M) Segregation & Disposition of Nonconforming Material 8a. QP-8300 Para. 7.2.2 states, "All disposition decisions are to be documented on the Nonconforming Materials Disposition Log, #qp8300-6 by the Quality Manager." No evidence was provided that would document dispositions of nonconforming helmets.
UNICOR QSE-08b			8b. Nonconforming raw material was observed being stored next to serviceable raw material without required reject tag. QP-8300, 7.2.1 requires nonconforming material be to identified with a Reject Tag, #qp8300-1, and be segregated in a limited access, controlled "Reject Hold Area."
UNICOR QSE-08c	QM-4220, 8.3, QP- 8300, qp6230-1, qp6220-36	8.3	<ul> <li>8c. A walk through of the helmet production area revealed numerous QP-8300 control of nonconforming product violations: <ul> <li>Numerous nonconforming helmets were discovered on red hold carts without required qp8300-1 reject tag at the final inspection area, machine shop area, helmet assembly area, and the perform arrangement area</li> <li>One nonconforming helmet did not have any identification written on it, qp6220-36 requires that the press operator write the helmet number on the helmet shell.</li> <li>A yellow serviceable helmet cart was being used as a nonconforming hold cart, quality assurance team presentation &amp; training document states, "All nonconforming helmets should be located on a red (HOLD CART)."</li> <li>The designated nonconformance segregation area as defined by qp6230-1 has serviceable helmet boxes being stored in the same area.</li> <li>Unauthorized reject hold carts are being stored against helmet drying room, and in helmet assembly area. These nonconforming helmets did not have the required qp8300-1 reject tag.</li> </ul> </li> <li>Factory floor plan qp6230-1 and QP-8300 is not being followed by employees, management oversight lacking.</li> </ul>
Observa	tions (O)		, , , , , , , , , , , , , , , , , , ,
UNICOR QSE- OBS-09	QP5410-1 Rev G dated 6/24/09	7.1a.b	9. (O) Quality objectives and requirements for the product are extracted from the performance requirements of Purchase Description specification FQ/PD 06-35A (Lightweight USMC Helmet-LMCH) and CO/PD-05-04 (Advanced Combat Helmet-ACH). The requirements for process and product validation are flowed down to the operator level. Master drawings are maintained in the document control center. (Adequate)
UNICOR QSE- OBS-10	QP7100 & QP4240 Rev G Dated 6/25/09	7.1 c, d, e	10. (O) All criteria for visual examinations for product acceptance are established per the purchase description. Objective quality records generated at all QC points on the manufacturing floor were not available.

UNICOR	QP7220	7.2.1	11. (O) Work processes and work instructions follow the criteria
QSE- OBS-11	Rev A dated 3/27/06		for manufacturing from material receiving to preform-pressing- painting-final assembly are adequately described in the QI 6220.
UNICOR QSE- OBS-12	QP7220 Rev A dated 3/27/09	7.2.2	12. (O) First article (FA) acceptance provided by Defense Supply Center-Philadelphia, provides the basis for capability of purchase description performance requirements for the Lightweight Helmet – Marine Corps by UNICOR. Letter of approval received on 9/14/09 and current production has been only 3500 units.
UNICOR QSE- OBS-13	QP7220 Rev A dated 3/27/09	7.2.2	13. (O) Quality objectives and requirements for the product are extracted from the performance requirements of Purchase Description specification FQ/PD 06-35A (Lightweight USMC Helmet-LMCH) and CO/PD-05-04 (Advanced Combat Helmet-ACH). The requirements for process and product validation are flowed down to the operator level. Master drawings are maintained in the document control center. (Adequate)
UNICOR QSE- OBS-14	QP7220 Rev A dated 3/27/09	7.2.3	14. (O) Product information and customer requirements for the tactical helmets are extracted from the performance requirements of Purchase Description specification FQ/PD 06-35A (Lightweight USMC Helmet-LMCH) and CO/PD-05-04 (Advanced Combat Helmet-ACH). (Adequate).
UNICOR QSE- OBS-15	QP7400 Rev A dated 7/02/09	7.4.1 & 7.4.2	15. (O) Purchasing requirements are extracted from the purchase description specification. Suppliers for ballistic and non ballistic testing are directed sources established by the customer. The testing laboratories H.P. White and Applied Technical Service Inc provide ballistic testing results. Cloth/textile components are purchased from two directed suppliers-Dupont Advanced Fiber Systems and Sioux Manufacturing Inc. (adequate)
UNICOR QSE- OBS-16	QP7400 Rev A dated 7/02/09	7.4.3	16. (O) Verification of the purchased product material inspection reports to determine if they meet purchase requirements were not available. All available suppliers Certificate of Conformance are not traceable to the material inspection reports. Procedure to be revised to link the lot of material to the batch of helmets produced. (Area for Improvement)
UNICOR QSE- OBS-17a, 17b, & 17c	QI6221-1; QI6223-3 & QP8240	7.5.1; 7.5.2	17a. (O) Work instructions are available for all operations within each of the work centers. Work/inspection procedures revised 11/24/09. Key product characteristics are evaluated and Quality Control points within the work centers. Key characteristics are extracted from the purchase description. Records of QC inspections were not available.  17b. (O) The use and availability of monitoring and measuring devices is controlled by the Factory Supervisor (FS). All measuring devices such as thickness gauge-calipers-pyrometers are within the calibration cycle. Some weight scales are outside of the facility being calibrated. Heat testing equipment-pyrometers-are cycled through calibration on a quarterly basis to allow availability of equipment in the helmet press area.

UNICOR QSE- OBS-18	QP8240	7.5.3	<ul> <li>17c. (O) All tooling equipment is maintained in a storage room, is locked and controlled. All tooling require signature sign-off. The Factory Supervisor monitors and controls access to all tooling equipment.</li> <li>All equipment is maintained by the Factory Supervisor and maintenance crew to continue operability and flow of production. The operator does not manipulate any of the operating equipment. The FS makes all equipment and program changes throughout the pressing, drilling, pre-paint and final paint process.</li> <li>18. (O) Quality control points throughout the manufacturing process verify product status. Traceability of quality controls</li> </ul>
		7.5.4	records to production lots was not available.  Not applicable.
UNICOR QSE- OBS-19	QP7550 Rev A dated 9/02/09	7.5.5	19. (O) Identification of the helmets is maintained starting in the Preform arrangement work center. Serialization marking of the helmet is verified at all QC points for accountability to the traveler work sheet/lot number. Serialized labels are controlled and maintained by the Factory Supervisor and are not placed on the helmet till final assembly. All constituent parts such as paints & adhesives are stored in locked containers and logged in by Julian date. All paints and adhesives are used on a first in-first out basis. Expiration dates are printed on all paint and adhesive containers.
Suggest	ions for Imp	rovement (I)	
UNICOR QSE-IMP- 20		8.2.3 8.2.4	<ul> <li>20. (I) Data is collected in the Hot Press area to determine the defect rate by Operator. If approximately 3 defects in 1500 are discovered, the worker loses their job.  There is very little that the worker can do to influence the outcome in this area.  Recommend: Defects rates (statistical analysis) be used to identify, analyze and continually improve product, process and system health.  Such as:  Improving control of nonconforming material  Improving yield rates through rework or accept as is dispositions on overweight helmets. (witnessed 33% defects on a run of LMCH of which 90 % of the defects were overweight by approximately .10 or less of an Ounce)</li> </ul>